An account of an Epidemic Fever,

as it appeared in Adams County in 1823;
being an

Inaugural Dissertation
for the

Degree of Doctor of Medicine.

by

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of
Pennsylvania

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W. R. H
Dean.

Introduction

The general importance attached to every epidemic, the extensive ravages committed by the one which has so recently pervaded our country and particularly the universal dominion it attained and exerted over Gettysburg and its vicinity, during the last three years whilst I was a student of Medicine, claims a right to my inaugural essay. I pretend not to enlarge the bounds of medical science or shed new light on the paths of philosophical inquiry, by developing its causes, displaying any new laws or proclaiming any specific method of treatment, nor shall I even attempt the more humble task of recording its history from its inception as a simple intermittent in 1821, nor trace its varying forms through continued, remittent and dysenteric in 1822, but be confined to the observations I was enabled to make during the last year. I will however premise, that its localities were the same in each year, that is,

the particular districts of country in which it appeared the first year were its theatre in all; and those situations which were exempt the first season, were equally fortunate in the succeeding ones with the exception of one, which, although severely suffering during the winter, was wholly exempt during the warmer months

An account &c.

The weather during the months of April and May was very cool with the exception of a few warm days. A great quantity of rain fell out during these months, owing to which, and to the coldness of the weather the farmers were unusually late in putting in their spring crops. Frosts were also very common, insomuch that fruit of almost every description failed. In June and July the weather became more moderate and pleasant. There were also considerable quantities of rain during these months, frequent showers alternated by warm sunshine. This was what is popularly termed very "seasonable weather," promising to agriculturists the most abundant crops. Nor were they disappointed in their expectations; vegetation of every kind flourished most luxuriantly. During this time we had some thunderstorms in which the lightning was remarkably vivid, followed in quick succession by most tremendous peals of thunder. About the

middle of August the weather set in warm, and continued warm and dry untill the 8th of September, when the rainy weather commenced. It continued cloudy and rained less or more almost every day untill the 20th when it cleared up cool and was succeeded by cool mornings and evenings with sharp white frosts

In May and June our country was almost free of any disease except a few cases of intermittents, (mostly mild tertians) which were then supposed either to be sporadic cases or relapses; the disease being chiefly confined to those who had laboured under it during the preceding autumn. In July the cases of intermittents of the tertian form became more numerous and many cases of quotidian intermittents, remittent and continued fever appeared violent in their symptoms bearing the use of the lancet to a considerable extent. In this month we had several cases of bilious colic, and one of dysentery which required for its cure, two copious bleedings, an antimonial emetic and a number of mercurial and saline purges.

Patients, mostly, for two or three days previous to the chill which was succeeded by the fever complained of great lan-
-guor, lassitude and soreness of the bones with anorexia and a dull heavy pain in the head. In others the pain in the head was more acute accompanied with pain in the loins and an obtuse pain in the eyeballs, so severe that it was almost impossible for them to look to either side with-
-out turning the whole head. In other cases the chill and fever was ushered in without any previous indisposi-
-tion. In some, the chill was so slight as to be almost imperceptible; they experienced a sensation of coldness along the spine and in the extremities. A few during the indis-
-position previous to the attack of fever experienced very little inconvenience from gastric distress, but on the con-
-trary the appetite remained unimpaired and even more voracious than natural. In such, the disease was always more obstinate and difficult of cure than those in which the stomach did not call for an impletion of animal and other strong food.

During the chill they were generally affected with nausea

or a retching and vomiting of a yellow or greenish bilious matter.

In a few instances patients were attacked with coma from the commencement. I heard of a woman who lay in a comatose state for five or six days without calling on medical aid, and expired.

Children were frequently after one or two days indisposition, attacked with convulsions and afterwards with fever. Some children were seized with convulsions on the second or third day of the disease; and a boy ten or twelve years of age who had been convalescent and had a relapse, expired in convulsions on the third day after the relapse

In the exacerbation patients complained of great thirst and burning of the mouth and fauces, and a disagreeable taste in the mouth; violent pain in the back and limbs and frequently a pain in the back of the neck. Sometimes the whole body was so tender and sore to the touch that the patient could not bear the hand to be laid on it. In others the soreness was confined chiefly to the

scalp. The pain in some, especially in the latter part of the season was principally seated in the intestines; in such every paroxysm appeared to be that of violent bilious colic. The face was flushed and the eyes red; and sometimes from the commencement, but frequently from the third or fourth day of the disease, the adnata of the eye was tinged with a yellow colour. The tongue in some cases was thickly covered with a white fur, but generally with a yellow scurf and again it had the appearance of being blackened with ink. In a few cases the tongue was clean and of a bright red colour and had a granulated sparkling appearance.
The respiration was hurried and laborious, with, in many cases, the sensation of a great weight and oppression about the precordia. The skin was dry, hard and parched, and frequently tinged with bile, especially about the third or fourth day of the disease. In some cases the yellowness of the skin continued for some days after convalescence took place. The urine was sparingly voided and high coloured. The bowels were generally bound, but

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the disease sometimes commenced with a violent purging and vomiting of bile. The pulse in the early part of the season, that is, during the month of July and part of August was full, round and frequently hard and tense. In the latter end of August and in September the pulse evidently assumed more of a typhoid character. It was more frequent, quick, soft, and easily compressed. After the 20th of September when the weather came up cool and the hoar frosts appeared it again became more inflammatory.

The remission was marked by an alleviation of most of the preceding symptoms, by a diminution of the heat of the body and by a gentle diaphoresis breaking out first on the forehead and afterwards over the whole body. Sometimes on the third or fourth day of the disease an eruption or efflorescence appeared on the skin. This was a favorable symptom.

I shall now proceed to give the treatment, which, in the hands of a physician of no ordinary eminence, my

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much esteemed preceptor, Doctor James H. Miller, proved in almost every case effectual in curing the disease.

When called on before the disease was completely formed or reaction had taken place, an emetic of Tartarized Antimony promptly administered and followed by an active cathartic, in most instances prevented an attack of the fever. But if, as was most generally the case, aid was not solicited before the disease was formed and reaction established, if the excitement was great with full, hard pulse, redness of the eyes, and severe pain in the head, blood-letting was employed with the most decided advantage. When used promptly and to an extent sufficient to afford relief from pain or until signs of syncope were induced, it proved the most effectual of any other remedy in producing a crisis to the disease, or in changing it from a remittent to an intermittent form. The operation was mostly followed by a termination of the paroxysm and by a gentle diaphoresis breaking out over the whole body. It also by equalizing the excitement, and frequently by allaying the

irritability of the stomach prepared the system for the more certain and free operation of other remedies, and mitigated the violence of the succeeding paroxysm. Whenever the symptoms called for a repetition of the operation it was employed with perfect safety and with evident advantage. Nor in any instance when employed under the existence of the preceding symptoms, did it prove deleterious by inducing that state of extreme debility, which is sometimes said to have resulted. On the contrary, unless the necessary evacuations were made in the commencement there always existed a great proneness in the disease to assume symptoms of a typhoid character.

Believing the stomach to be the primary seat of disease in these fevers, emetics were next resorted to for the purpose of cleansing that organ of its acrid and vitiated contents, when the peculiar situation of the patient did not forbid the employment of this remedy. For this purpose Tart. Ant. in doses of 5 or 6 grs. administered in divided portions was prefered. The operation of this medicine was

succeeded by an alleviation of suffering, a gentle diaphoresis, and frequently a tranquil sleep. It always brought away large quantities of acrid bilious matter and hardly ever failed to relieve nausea, and that oppression about the praecordia and difficulty of breathing which is frequently the cause of so much alarm to patients. If these symptoms continued after the operation of one dose a repetition of the same medicine was prescribed with evident advantage. They also prepared the stomach for the reception of Cathartics, the next class of remedies employed. A great variety of articles of this class was employed, but that which proved the most efficacious in breaking up the chain of morbid action in the system, in making a permanent impression on the alimentary canal and in cleansing it of its acrid and vitiated contents, was Calomel. This medicine was either administered alone in doses of from 10 to 20 grs. and followed by Sulphas Mag. Fol. Sen. or Ol. Ric. or in combination with Jalap Rheubarb, Colycynth or Gamboge. Calomel & Jalap, in doses of from grs X to XV of the former and grs XV to XXX of

the latter was very frequently advantageously employed. But sometimes, owing to the irritability of the stomach and the bulk of the medicine it was rejected. Here, Calomel alone was more beneficially employed, being more easily retained by the stomach. It was also sometimes given in doses of two or three grains repeated every two or three hours. Given in this manner it hardly ever failed completely to evacuate the bowels and bring away black tarry stools which were mostly the forerunners of convalescence. Indeed in most instances convalescence was not produced untill such evacuations were procured. This plan was pursued for two, three or four days, or untill the bowels appeared to be cleansed of their vitiated contents, when Sal Eps. Tol. Jen & Crem. Tart. or Magnesia was substituted. In some cases in which symptoms assumed rather a typhoid character, in which great irritability of stomach existed and in which it was difficult to get medicines to have their specific effects the following, following possessed the threefold property of allaying irritability, producing a moderate diaphoresis

and keeping the bowels in a soluble condition: ℞ Calomel grij, Camphor grs iv, Opium grs ij, M ft pill. No ij Una Cap. omni hora. Also in low states of the system when the pulse was feeble, with dark, furred and dry tongue, by administering Calomel in combination with Camphor the system was invigorated by one while the specific effects of the other was obtained. In a few cases a ptyalism followed the exhibition of calomel. When this occured little inconvenience was experienced except that of a sore mouth After evacuating the alimentary canal of its contents Diaphoretics were next resorted to. If arterial excitement continued the most effectual was Nit. Potas. & Tart. Ant. combined, thus: Nit Pot ℥j Tart ant grij Aqua ℥j dose a table spoonful every hour. Various other diaphoretics were beneficially employed as Tart. Ant. alone, Nitrous powders, Spt. Mindereri &c. Serpentaria combined with Senna answered a good purpose in keeping up a moderate perspiration and also in keeping the bowels in a soluble condition. The following, when the symptoms were of a typhoid nature was exhibited ℞ Carb. Ammon.

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℞ Essentiae oil gtt xx Aqua Pont. ℥ij M. dose a table spoonful every hour. It was also sometimes serviceable in relieving gastric distress

Epispastics were another invaluable remedy in this disease. Where pain in the head continued after the necessary depletion, or if delerium or coma existed, a blister applied to the nape and sinapisms to the extremities almost always afforded relief. Sinapisms or blisters applied to the epigastrium always proved effectual in relieving gastric distress, when other remedies failed. In short, too much cannot be said of this most valuable remedy, which in many instances appeared to possess a magic power in assuageing the agony of pain, in moderating the force of a disturbed circulation and in preventing undue determinations to important organs

After making the necessary evacuations in the commencement of the disease, if pain and restlessness continued with want of sleep, Opium was administered with a most happy effect. It was given either alone in the form of pill or tincture or in combination with calomel. An opium pill given at bed

time and repeated if necessary frequently procured a remission of fever by exciting a moderate perspiration and disposing to sleep. In the intermittent forms of this disease the paroxysm was sometimes anticipated by from XX to XL drops Thebaic Tincture or gr. ℔ to ij of Opium. It always moderated the violence of the chill and frequently prevented it. Morbid vigilance was also generally relieved by Opium

Tonics were prescribed as soon as the necessary evacuations were made and a complete intermission obtained. It may be proper to remark here that in many cases in which they were taken by patients without the necessary evacuations being premised they were the cause of changing the disease from an intermittent to a remittent form. A variety of this class of medicines were employed, but the chief reliance was placed in the Cort. Peruv. This was given either in substance, decoction &c, according to the state of the stomach which was to receive it. The following formula in many cases in which the bark alone proved inert was successfully prescribed ℞ Cinch. ℥ß. Sept. va. ℥j. Sal Tart ℥j M. ft. pulv. mix one to be taken four times a day The

Sulph. Quinine was also employed in a number of cases. This of all other remedies was prescribed with the greatest certainty of success. It appeared to operate like a charm in the cure of intermittents. In no case was more than from six to twelve grs necessary for a cure. Various other tonics were employed and with decided advantage. A combination of Gentian, Columbo, Serpt., Rheubarb, Sal Tartar and Cortex Aurant. given in decoction appeared to agree with the stomach in weak and irritable states of that organ much better than the bark. Dr. Miller informs me that in a number of cases he has given the Carb. Magnesia with a most happy effect in the treatment of this complaint. He gave it in doses of a tea spoonful every hour or two, during both the intermission and paroxysm.

To guard against a relapse, it was necessary strictly to attend to the ordinary means recommended for that purpose, such as enjoining a due regulation of diet, and avoiding exposure to cold and moisture and night-air. Yet notwithstanding every precaution they

were by no means uncommon.